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**AIR OPERATING PERMIT WA 000092-2**

In compliance with the provisions of The State of Washington  
Clean Air Act Chapter 70.94 Revised Code of Washington

**Port Townsend Paper Corporation  
P.O. Box 3170  
Port Townsend, Washington 98368**

is authorized to emit in accordance  
with the terms and conditions  
of this permit.

Issued by:

State of Washington  
DEPARTMENT OF ECOLOGY  
300 Desmond Drive  
P.O. Box 47600  
Olympia, Washington 98504-7600

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## **INTRODUCTION AND LEGAL AUTHORITY**

This Air Operating Permit is authorized under the Operating Permit Regulation, Chapter 173-401 WAC. The provisions of this permit describe the emissions limitations, operating requirements, monitoring and recording requirements, and reporting frequencies for the permitted source.

Port Townsend Paper Corporation requires a Title V Air Operating Permit because it emits or has the potential to emit, one hundred tons per year or more of one or more air pollutants WAC 173-401-300(1).

During the drafting of this permit Ecology has attempted to incorporate requirements using the exact language of the law, regulation, or order. In some cases, this has not been possible. Where there is a difference in language, this difference is presented in this permit only for clarification of the underlying requirement. The legal requirement remains the underlying requirement. Any conflict between the permit and an underlying requirement that is not acknowledged in this permit or its Support Document, nor is addressed in past orders or permits referenced in this permit or its Support Document, will be resolved by referring to the underlying requirement. Unless otherwise stated, the effective date of referenced regulations or statutes is that of the provision in effect on the date of permit issuance.

The Title V Air Operating Permit consists of all parts of this assembled document including all Appendices.

The definition of terms contained in WAC 173-401-200, and as defined in all referenced regulations, apply to this permit unless otherwise defined in the permit.

## **EMISSION UNIT SPECIFIC REQUIREMENTS [WAC 173-401-600]**

Requirements included in the permit are federally enforceable per WAC 173-401-625, unless specifically identified as being state-only requirements. The emission units covered by conditions A through H are subject to the following emission limits. General requirements that apply to monitoring, recordkeeping and reporting for these limits are in the Facility-Wide section of this permit. Monitoring and reporting requirements are requirements that the permittee uses to determine compliance and are specific to each limit are listed in the emission unit specific tables, and should be read in conjunction with the general requirements. Unless specified otherwise, the basis of authority for the type and frequency of monitoring imposed in conditions A through H is WAC 173-401-615.

Refer to Appendix B for emission estimate algorithms. These algorithms set forth the manner by which emissions are calculated for those requirements for which the Reference Method itself does not directly result in an emission estimate. The Permittee may use an equivalent alternative method with written approval from Ecology.

## A. Recovery Furnace

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
A.1	Particulate	0.08 gr/dscf @ 8% O <sub>2</sub> , one hour average.	Sample monthly (see A.5) using EPA Method 5 except that the permittee may conduct one test of at least one hour in lieu of three 1-hour tests. Report test results monthly. See Condition A.4 for minimum O&M requirements intended to indicate compliance with the particulate limit.	Order DE 00AQIS-131
		0.10 gr/dscf @ 8% O <sub>2</sub> , one hour average.	Same as for previous limit.	WAC 173-405-040(1) (a)
A.2	Opacity	35% average for more than 6 consecutive minutes in any 60 minute period.	Monitor continuously using an approved CEM that conforms to 40 CFR 60, App. B, Perf. Spec. 1. Report excursions monthly. Compliance may also be determined using EPA Method 9.	WAC 173-405-040(6) and Order DE 00AQIS-131 for basis of opacity limit. Order DE 00AQIS-131 for continuous monitoring requirement.
A.3	SO <sub>2</sub>	200 ppm @ 8% O <sub>2</sub> , one hour average.	Sample monthly (see A.5) using modified EPA Method 6 except that the permittee may conduct one 1-hour test in lieu of three 1-hour tests. Report excursions monthly.	Order DE 00AQIS-131 and PSD-I
		500 ppm @ 8% O <sub>2</sub> , one hour average.	Same as for previous limit.	WAC 173-405-040(11) (a)
A.4	Monitor opacity with a COM as a compliance indicator. Take corrective action immediately whenever audible alarm indicates 6 minute opacity average greater than 35%. Failure to take corrective action within 24 hours is a violation of WAC 173-405-040(10) and may be a violation of the underlying applicable requirement. Report corrective action and opacity excursions monthly. (Order DE 00AQIS-131)			
A.5	Source testing shall be reduced to quarterly if 6 consecutive monthly source test results are all below 75% of the emissions limitation. If any single test result exceeds 75% of the limitation, source testing shall revert to a monthly frequency until 6 consecutive monthly source test results are all below 75% of the limitation. (See Support Document for rationale behind this condition) (Order DE 00AQIS-131)			
A.5a	<p>In addition to source test data submitted for the recovery furnace, the average opacity occurring during the source test run shall be reported with the results of the source test. Sufficient data from the source test shall be submitted to allow Ecology to make the calculations leading to the source test results. Such data shall be reported for each source test run. PTPC shall establish a means to determine the flow split between the ESPs. During each source test the flow split will be determined using this method and will be reported with the source test data.</p> <p>Black liquor flow rate, density, and percent solids shall be averaged and reported for the period of time of each source test run. As an alternative, the company can estimate the total solids fired during the source test run. Primary and secondary voltage and current, and spark rate (if available) for each TRC unit shall be logged every hour during the source test. This data shall be reported with the source test data. (Order DE 00AQIS-131)</p>			

A.6 The following **state-only** requirements are not federally enforceable under the federal Clean Air Act:

A.6a	Particulate	0.05 gr/dscf @ 8% O <sub>2</sub> , one hour average.	Sample monthly (see A.5) using EPA Method 5 except that the permittee may conduct one test of at least one hour in lieu of three 1-hour tests. Report test results monthly.	Order DE 00AQIS-131
A.6b	TRS	5.0 ppm @ 8% O <sub>2</sub> , 24 hour average	Monitor continuously using an approved CEM that conforms to 40 CFR 60, App. F and App. B, Perf. Spec. 5. Report excursions monthly.	Order DE 00AQIS-131
		17.5 ppm @ 8% O <sub>2</sub> , 24 hour average	Limit met by meeting Order limit.	WAC 173-405-040 (1) (b)
A.6c	O <sub>2</sub>	no limit - required to correct TRS data	Monitor continuously using an approved CEM that conforms to 40 CFR 60, App. F and App. B, Perf. Spec. 3.	Order DE 00AQIS-131

**B. Smelt Dissolver Tank**

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
B.1	Particulate	0.3 lbs/ton BLS, one hour average.	Sample monthly (see B.4) using EPA Method 5 or Ecology Method 8 except that the permittee may conduct one test of at least one hour in lieu of three 1-hour tests. Report test results monthly. See Condition B.3 for minimum O&M requirements intended to indicate compliance with the particulate limit.	WAC 173-405-040(2) and Order DE 00AQIS-131 for basis of particulate limit. Order DE 00AQIS-131 for monitoring frequency.
B.2	Opacity	35% average for more than 6 consecutive minutes in any 60 minute period.	Scrubber shower flow $\geq 50$ gpm. An excursion is defined as any hour in which scrubber flow is $< 50$ gpm for six consecutive minutes or longer. Monitor scrubber flow rate continuously; record continuously; report excursions monthly. Compliance may also be determined using EPA Method 9.	WAC 173-405-040(6) and Order DE 00AQIS-131 for basis of opacity limit. Order DE 00AQIS-131 for alternate opacity monitoring.
B.3	Monitor opacity with scrubber shower flow as a compliance indicator. Take corrective action immediately whenever scrubber flow is $< 50$ gpm for 60 consecutive minutes. Failure to take corrective action within 24 hours is a violation of WAC 173-405-040(10) and may be a violation of the underlying applicable requirement. Report corrective action and opacity excursions monthly. (Order DE 00AQIS-131)			
B.4	Source testing shall be reduced to quarterly if 6 consecutive monthly source tests results are all below 75% of the emissions limitation. If any single test result exceeds 75% of the limitation, source testing shall revert to a monthly frequency until 6 consecutive monthly source test results are all below 75% of the limitation. (See Support Document for rationale behind this condition) (Order DE 00AQIS-131)			

## C. Lime Kiln

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
C.1	Particulate	0.13 gr/dscf @ 10% O <sub>2</sub> , one hour average.	Sample monthly (see C.6) using EPA Method 5 or Ecology Method 8 except that the permittee may conduct one test of at least one hour in lieu of three 1-hour tests. Report test results monthly. See Condition C.5 for minimum O&M requirements intended to indicate compliance with the particulate limit.	WAC 173-405-040(3) (a) and Order DE 00AQIS-131 for basis of particulate limit. Order DE 00AQIS-131 for monitoring frequency.
C.2	Opacity	35% average for more than 6 consecutive minutes in any 60 minute period.	Venturi pressure drop ≥15 inches of H <sub>2</sub> O (gauge). An excursion is defined as any hour in which the pressure drop is <15 inches of H <sub>2</sub> O (gauge) for six consecutive minutes or longer. Monitor scrubber pressure drop continuously; record continuously; report excursions monthly. Compliance may also be determined using EPA Method 9.	WAC 173-405-040(6) and Order DE 00AQIS-131 for basis of opacity limit. Order DE 00AQIS-131 for alternate opacity monitoring.
C.3	SO <sub>2</sub>	500 ppm @ 10% O <sub>2</sub> , hourly avg.	Sample monthly (see C.6) using EPA Method 6 except that the permittee may conduct one test of at least one hour in lieu of three 1-hour tests. Report test results monthly. See Condition C.7 and C.7a for minimum O&M requirements intended to indicate compliance with the SO <sub>2</sub> limit.	WAC 173-405-040(11) (a) and Order DE 00AQIS-131 for basis of SO <sub>2</sub> limit. Order DE 00AQIS-131 for monitoring frequency.
C.4	TRS	8 ppm @ 10% O <sub>2</sub> , 12 hour average.	Monitor continuously using an approved CEM that conforms to 40 CFR 60, App. F and App. B, Perf. Spec. 5. Report excursions monthly.	40 CFR 60.283 (a) (5) and Order DE 00AQIS-131 for limit. 40 CFR 60.284 (a) (2) and Order DE 00AQIS-131 for monitoring.
C.4a	O <sub>2</sub>	no limit - required to correct TRS data	Monitor continuously using an approved CEM that conforms to 40 CFR 60, App. F and App. B, Perf. Spec. 3.	Order DE 00AQIS-131
C.5	Monitor opacity with venturi pressure drop as a compliance indicator. Take corrective action immediately whenever the pressure drop is <15 inches for 60 consecutive minutes. Failure to take corrective action within 24 hours is a violation of WAC 173-405-040(10) and may be a violation of the underlying applicable requirement. Report corrective action and opacity excursions monthly. (Order DE 00AQIS-131)			
C.6	Source testing shall be reduced to quarterly if 6 consecutive monthly source tests results are all below 75% of the emissions limitation. If any single test result exceeds 75% of the limitation, source testing shall revert to a monthly frequency until 6 consecutive monthly source test results are all below 75% of the limitation. (See Support Document for rationale behind this condition) (Order DE 00AQIS-131)			
C.7	Monitor venturi pressure drop as a compliance indicator. Take corrective action immediately whenever the pressure drop is <15 inches for 60 consecutive minutes. Failure to take corrective action within 24 hours is a violation of WAC 173-405-040(10) and may be a violation of the underlying applicable requirement. Report corrective action and excursions monthly. (Order DE 00AQIS-131)			
C.7a	During the first 12 months after permit issuance, PTPC shall collect scrubber data during SO <sub>2</sub> source tests. If SO <sub>2</sub> compliance occurs during all source tests while maintaining proper venturi pressure drop; the venturi pressure drop parameter will be determined to be adequate minimum O&M requirements to indicate compliance with the SO <sub>2</sub> limit as described in condition C.3. (Order DE 00AQIS-131)			
C.8	Stack Height shall be ≥31 meters before production exceeds 650 tons/D unbleached pulp. PTPC has certified stack height is ≥31 meters. Report if stack is shortened. (PSD I)			

C.9 The following **state-only** requirements are not federally enforceable under the federal Clean Air Act:

C.9a

TRS	20 ppm @ 10% O <sub>2</sub> , 24 hour average.	Limit met by meeting Condition C.4.	WAC 173-405-040(3) (c)
	80 ppm H <sub>2</sub> S @ 10% O <sub>2</sub> for more than 2 consecutive hours	Monitor TRS continuously using an approved CEM that conforms to 40 CFR 60, App. F and App. B, Perf. Spec. 5. Report excursions monthly (if the upper range of the monitor is less than 80 ppm, all off scale measurements shall be considered >80 ppm). All TRS monitored is considered H <sub>2</sub> S for this limit.	WAC 173-405-040(3) (b) for basis of limit Order DE 00AQIS-131 for basis of monitoring



**D. Power Boiler #10**

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
D.1	Particulate	0.10 lb/mmBtu, one hour average	Sample monthly (see D.7) using EPA Method 5 except that the permittee may conduct one test of at least one hour in lieu of three 1-hour tests. Report test results monthly. See Condition D.6 for minimum O&M requirements intended to indicate compliance with the particulate limit.	40 CFR 60.42(a)(1) and Order DE 00AQIS-131 for basis of limit. Order DE 00AQIS-131 for frequency of monitoring. 40 CFR 60.46(b)(2) and Order DE 00AQIS-131 for basis of monitoring.
D.2	Opacity	Average 20% for more than 6 consecutive minutes in any 60 minute period, except for emissions due to soot blowing or grate cleaning for up to 15 minutes in 8 consecutive hours.	Quench H <sub>2</sub> O flow ≥100 gpm, scrubber H <sub>2</sub> O flow ≥100 gpm, and scrubber air flow ≥1300 cfm. An excursion is defined as any hour in which quench H <sub>2</sub> O flow is <100 gpm, scrubber H <sub>2</sub> O flow is <100 gpm, and/or scrubber air flow is <1300 cfm for six consecutive minutes or longer. Monitor quench H <sub>2</sub> O flow, scrubber H <sub>2</sub> O flow, and scrubber air flow continuously; record continuously; report excursions monthly. Visually inspect baffle each scheduled maintenance down. Record results; report deficiencies and repairs made. Compliance may also be determined using EPA Method 9.	WAC 173-405-040(6) and Order DE 00AQIS-131 for basis of limit. WAC 173-400-105(5)(a)(i) and Order DE 00AQIS-131 for basis of alternative opacity monitoring.
		Average 20% for more than 6 consecutive minutes in any 60 minute period, except for one six minute period of not more than 27% opacity.	Same as for previous limit.	40 CFR 60.42(a)(2) basis for limit. 40 CFR 60.45(a) basis for monitoring.
		Salty hog fuel shall not be burned.	Monitor hog fuel shipments. Report any salty hog fuel burned on monthly report.	Order DE 00AQIS-131
D.3	SO <sub>2</sub>	0.8 lb/mmBtu, 3 hour average	Maintain fuel receipts showing all oil fired was ≤0.76% sulfur. (D.9) Report all occasions when fuel with S content >0.76% burned.	40 CFR 60.43(a)(1) and Order DE 00AQIS-131 for basis of limit. 40 CFR 60.45(g)(2) and Order DE 00AQIS-131 for averaging interval. 40 CFR 60.45(b)(2) and Order DE 00AQIS-131 for basis of monitoring.
		1000 ppm @ 7% O <sub>2</sub> , hourly average.	Maintain fuel receipts showing all oil fired was ≤2% sulfur. Report all occasions when fuel with S content >2% burned.	WAC 173-405-040(11)(b) for basis of limit.
D.4	NO <sub>x</sub>	0.30 lb/mmBtu, 3 hour average	Monitor continuously using an approved CEM that conforms to 40 CFR 60, App. F and App. B, Perf. Spec. 2. Report excursions monthly.	40 CFR 60.44(2) and Order DE 00AQIS-131 for basis of limit. 40 CFR 60.45(g)(3) and Order DE 00AQIS-131 for averaging interval. 40 CFR 60.45(a) and Order DE 00AQIS-131 for basis of monitoring.
D.5	O <sub>2</sub>	no limit - required to correct NO <sub>x</sub> data	Monitor continuously using an approved CEM that conforms to 40 CFR 60, App. F and App. B, Perf. Spec. 3.	40 CFR 60.45(a) and Order DE 00AQIS-131.

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| D.6  | Monitor opacity with scrubber quench H <sub>2</sub> O flow, scrubber H <sub>2</sub> O flow, and scrubber air flow as a compliance indicator. Take corrective action immediately whenever scrubber quench H <sub>2</sub> O flow is <100 gpm and/or scrubber H <sub>2</sub> O flow is <100 gpm and/or scrubber air flow is <1300 cfm for 60 consecutive minutes. Failure to take corrective action within 24 hours is a violation of WAC 173-405-040(10) and may be a violation of the underlying applicable requirement. Report corrective action and opacity excursions monthly. (Order DE 00AQIS-131) |
| D.6a | During the first 12 months after permit issuance, PTPC shall collect scrubber data during source tests. If particulate compliance occurs during all source tests while maintaining proper scrubber quench H <sub>2</sub> O flow, scrubber H <sub>2</sub> O flow, and scrubber air flow; the scrubber parameters will be determined to be adequate minimum O&M requirements to indicate compliance with the particulate limit as described in condition D.6. (Order DE 00AQIS-131)  |
| D.7  | Source testing shall be reduced to quarterly after collection of data required by condition D.6a, if the previous 6 consecutive monthly source tests results are all <75% of the emissions limitation. If any single test result exceeds 75% of the limitation, source testing shall revert to a monthly frequency until 6 consecutive monthly source test results are <75% of the limitation. (See Support Document for rationale behind this condition) (Order DE 00AQIS-131)  |
- D.8 Stack Height shall be ≥53 meters before production exceeds 650 tons/D unbleached pulp. PTPC has certified stack height is ≥53 meters. Report if stack is shortened. (PSD I)
- D.9 Power Boiler #10 shall comply with all the applicable requirements of the new source performance standards for fossil-fuel-fired-steam generators in 40 CFR Part 60 Subpart D. (Order DE 00AQIS-131)
- Compliance with 40 CFR Subpart D SO<sub>2</sub> emission limits shall be met using fuels receipts until such time as:
- 40 cfr 60.45(d) describing a fuel monitoring program is completed, or
  - PTPC receives EPA approval of an alternative monitoring method. Before using this option, PTPC shall submit a copy of the EPA approval letter with the approved alternative monitoring program and reporting requirements to the Department.
- Should a or b occur, the permit will be opened and the condition will be revised to reflect the EPA requirements.

**E. Package Boiler**

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
E.1a	Particulate matter (PM)	0.10 lb/mmBtu, 30 day rolling average, excluding start-up (see footnote 6e)	Sample monthly using EPA Method 5.	PSD 96-01A
		56.3 tons/yr	Calculate using the average of Method 5 test results collected during the year times fuel consumption for the year (mmBtu). Report annually.	PSD 96-01A
		0.2 gr/dscf @ 7% O <sub>2</sub> , one hour average.	Same as for 0.010 lb/mmBtu limit.	WAC 173-405-040(5)(a).
E.1b	Particulate matter <10 microns (PM10)	0.086 lb/mmBtu, 30 day rolling average, excluding start-up (see footnote 6e)	Calculate by multiplying PM result by 0.86. Report monthly.	PSD 96-01A
		48.4 tons/yr	Calculate using the average of monthly results calculated during the year times fuel consumption for the year (mmBtu). Report annually.	PSD 96-01A
E.2	Opacity	Average 15% for more than 6 consecutive minutes in any 60 minute period, except for emissions due to soot blowing or grate cleaning for up to 15 minutes in 8 consecutive hours. see footnote 6e	Monitor continuously using an approved CEM that conforms to 40 CFR 60, App. F and App. B, Perf. Spec. 1. Compliance may also be determined using EPA Method 9. Report excursions monthly.	PSD 96-01A
		Average 20% for more than 6 consecutive minutes in any 60 minute period, except for emissions due to soot blowing or grate cleaning for up to 15 minutes in 8 consecutive hours.	Same as for previous limit.	WAC 173-405-040(6)
		Average 20% for more than 6 consecutive minutes in any 60 minute period, except for one six minute period of not more than 27% opacity.	Same as for previous limit.	40 CFR 60.43b(f) basis for limit. 40 CFR 60.48b(a) basis for monitoring.

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
E.3	SO <sub>2</sub>	0.80 lb/mmBtu, 30 day rolling average	see footnote 2e	First Revision-DE 97AQ-I030; and 40 CFR 60.42b(a) basis for limit 40 CFR 60.47b(b) (1), (3), & (4) basis for monitoring
		1000 ppm @ 7% O <sub>2</sub> , hourly average.	Maintain fuel receipts showing all oil fired was ≤0.50% sulfur.	WAC 173-405-040(11) (b)
E.4	NO <sub>x</sub>	0.38 lb/mmBtu, 30 day rolling average (see footnote 4e)	Monitor continuously using an approved NO <sub>x</sub> CEM that conforms to 40 CFR 60, App. F and App. B, Perf. Spec. 2. Monitor O <sub>2</sub> continuously using an approved CEM that conforms to 40 CFR 60, App. F and App. B, Perf. Spec. 3. Calculate lb/mmBtu using formula found in 40 CFR Part 60, Appendix A, Method 19, section 2.1. See footnote 5e for reporting requirements.	PSD 96-01A
		217 tons/yr		
		0.40 lb/mmBtu, 30 day rolling average	Same as for previous limit.	40 CFR 60.44b(a)
E.5	Fuel Consumption	28,995 tons/yr 7,836,000 gal/yr 301,128 lbs/D 40,683 gal/D	Monitor in lbs/hr and gals/hr using meter with accuracy of +/- 0.5%. Calibrate meter according to manufacturers recommendations. Include items in footnote 1e in monthly report.	First Revision-Order DE 97AQ-I030 and PSD-96-01A
E.6	Fuel supply	Primary fuel shall be a reprocessed fuel oil. Number 2 fuel oil (0.05% sulfur) may be used as a backup fuel.	Report fuel type used on monthly report.	PSD 96-01A
		Sulfur ≤0.50% by weight	Analyze all fuel shipments for listed parameters using EPA or ASTM approved test methods. Monthly submit a table summarizing the sulfur concentration for all shipments of fuel received to be burned in the boiler.	First Revision-Order DE 97AQ-I030 and PSD-96-01A
		Nitrogen ≤0.138% by weight Ash ≤0.54% by weight	Analyze all fuel shipments for listed parameters using EPA or ASTM approved test methods. Monthly submit a table summarizing concentrations of the listed parameters for all shipments of fuel received to be burned in the boiler.	PSD 96-01A
E.7	CO	116 ppm @ 7% O <sub>2</sub> , 24 hour average	Operate boiler within operating conditions specified in PTPC documents TS#4 and SOP#29 (see appendix C). Report excursions in monthly report. Excursions are noted in footnote 3e.	First Revision-DE 97AQ-I030
E.8	VOC	8 ppm @ 7% O <sub>2</sub> , 24 hour average	Operate boiler within operating conditions specified in PTPC documents TS#4 and SOP#29 (see appendix C). Report excursions in monthly report. Excursions are noted in footnote 3e.	First Revision-DE 97AQ-I030

E.9 Port Townsend Paper Corporation has identified in an operation and maintenance (O&M) manual for the boiler, operational parameters and practices that have been described as "good combustion practice." The O&M manual includes a description of records that will be maintained to insure the continuous application of "good combustion practice." The pertinent parts of the O&M manual include SOP #29, TS #2, TS #3, TS #4, and a sample package boiler daily records sheet. The O&M manual shall be maintained by Port Townsend Paper Corporation and be available for review by state, federal, and local agencies. (PSD 96-01A).

E.10 Special reporting requirements (PSD 96-01A):  
Report monthly the following CEM test data (40 C.F.R 60.49b):

- 1) Days for which data was not collected,
- 2) Reasons for which data was not collected,
- 3) Identification of times when the pollutant concentration exceeds span of the CEM,
- 4) Description of any modifications to the CEM system that could affect the ability of the system to comply with performance specifications 2 or 3, and
- 5) Results of any CEM drift tests.

Also, in addition, Port Townsend Paper corporation shall maintain monitoring records on site for at least two years, and shall submit:

- 1) Excess emission reports, as appropriate and
- 2) Results of any source tests.
- 3) Records of the nitrogen content, sulfur content, ash content, and heating value (Btu/lb.) of the oil on a per calendar quarter basis.

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
E.11	Fuel supply	Arsenic ≤0.4 ppm by weight Cadmium ≤0.97 ppm by weight Chlorine ≤650 ppm by weight Chromium ≤10 ppm by weight Lead ≤20 ppm by weight PCBs ≤2 ppm by weight	Analyze all fuel shipments for listed parameters using EPA or ASTM approved test methods. Monthly submit a table summarizing concentrations of the listed parameters for all shipments of fuel received to be burned in the boiler. The Department may reduce monitoring frequency.	First Revision, Order DE 97AQ-I030 and WAC 173-460-150/160.
		Calcium ≤1020 ppm by weight Copper ≤30 ppm by weight	Analyze one shipment of fuel received to be burned in the boiler per permit cycle for listed parameters using EPA or ASTM approved test methods. Once per permit cycle submit a table summarizing concentrations of the listed parameters.	First Revision, Order DE 97AQ-I030 and WAC 173-460-150/160 basis for limit WAC 173-401-615(1)(b) basis for monitoring

Footnotes:

1e. Fuel consumption items to report (First Revision-Order 97AQ-I030):  
the amount of fuel burned daily in pounds and gallons,  
the total amount of fuel burned during the month in pounds and gallons, and  
the cumulative total of fuel burned during the calendar year in pounds and gallons.

- 2e. Compliance with 40 CFR Subpart Db SO<sub>2</sub> emission limits shall be met by complying with option "a" or "b" listed below. (40 cfr 60.47b(b) and First Revision-Order 97AQ-I030).
- a. The 30-day rolling average of SO<sub>2</sub> emissions from the package boiler shall not exceed 0.80 lb/mmBtu. Compliance shall be determined by burning fuel that does not exceed 0.50% sulfur by weight. The SO<sub>2</sub> emission rate shall be calculated based on daily fuel sample analysis in accordance with 40 CFR 60.47b(b)(1), (3), and (4). The following information shall be included in the monthly air report.
    - 1) calendar date.
    - 2) daily value and 30 day rolling average for fuel % sulfur.
    - 3) daily value and 30 day rolling average for SO<sub>2</sub> emission rate in lb/mmBtu.
    - 4) identification of each day the 30 day rolling average exceeds the SO<sub>2</sub> emission limit and each day the fuel sulfur concentration exceeds the fuel sulfur specification, including reasons for the excess and a description of any corrective action taken.
    - 5) identification of operating days when fuel sulfur data were not obtained, including justification and any corrective action taken.
    - 6) identification of any operating day data that were excluded from calculations, including justification and any corrective action taken.
    - 7) identification of "F" factor used for calculations, method of determining the factor, and type of fuel combusted.
  - b. Comply with an alternative monitoring method approved by the Environmental Protection Agency (EPA). Before using this option, PTPC shall submit a copy of the EPA approval letter with the approved alternative monitoring program and reporting requirements to the Department.
  - c. For purposes of this condition, a 30-day rolling average consists of 30 consecutive operating days. An operating day means a 24-hour period based on the mill day (between 0600 AM and 0600 AM the following day) during which period any fuel is combusted at any time in the steam generating unit. It is not necessary for the fuel to be combusted continuously for the entire 24-hour period. If no fuel is burned during a 24-hour period that day is not an operating day for the purposes of the 30-day rolling average.
- 3e. Operation of the package boiler outside of the approved operating conditions either; continuously for more than one hour, or for a total of more than four hours on any one day will constitute an exceedence of the CO and VOC emission limits. All exceedences shall be reported in the monthly air report. (First Revision-Order 97AQ-I030).
- 4e. The nitrogen oxides (NO<sub>x</sub>) emissions limitation contained in Condition E.4 will be adjusted as provided for by this condition. The adjusted NO<sub>x</sub> emission limit shall be determined by taking the boiler's highest validated 30-day rolling average NO<sub>x</sub> emission rate, at or below 0.38 lb./mmBtu (the Highest Validated Emission Rate) and adding 0.02 lb./mmBtu to account for emission monitor error rate. The adjusted NO<sub>x</sub> emission limit shall be 0.38 lb./mmBtu if the resulting sum exceeds that figure.

The Highest Validated Emission Rate shall be determined as follows:

Port Townsend Paper Corporation shall submit, on or before January 30, 1999, a written report to the Department stating all 30-day rolling averages of NO<sub>x</sub> emissions, in lbs./mmBtu, recorded during the preceding calendar year. This report shall identify the twenty (20) highest recorded average NO<sub>x</sub> emission rates (at or below 0.38 lb./mmBtu), and shall include a demonstration of the validity of these recorded averages. Port Townsend Paper Corporation may, but is not required to, propose one of these recorded averages as the Highest Validated Emission Rate. If the Department and Port Townsend Paper Corporation concur that one of the recorded averages constitutes the Highest Validated Emission Rate, the NO<sub>x</sub> emissions limitation will be adjusted based upon the selected emission rate. If there is not agreement on a Highest Validated Emission Rate, then no later than January 30, 2000, Port Townsend Paper Corporation shall report the same information for calendar year 1999, and the same procedures will apply to that report.

If no Highest Validated Emission Rate has been selected based upon either of the previous reports, Port Townsend Paper Corporation shall submit a report no later than January 30, 2001 to the Department stating all 30-day rolling averages of NO<sub>x</sub> emissions, in lbs./mmBtu, recorded during the preceding calendar year and identifying the recorded average Port Townsend Paper Corporation proposes be identified as the Highest Validated Emission Rate. The report shall include a demonstration of why the recorded average selected by Port Townsend Paper Corporation is valid. The Department may concur in Port Townsend Paper Corporation's proposal, or may reject it if the Department determines the proposed recorded average does not satisfy validation criteria. If the Department rejects Port Townsend

Paper Corporation's proposal, the Department will, after providing Port Townsend Paper Corporation an opportunity to comment, select the next highest recorded average that satisfies the same validation criteria applied in rejecting Port Townsend Paper Corporation's proposal as the Highest Validated Emission Rate. The Department's final determination of the Highest Validated Emission Rate is not subject to appeal by Port Townsend Paper Corporation. (PSD 96-01A).

- 5e. Report monthly the following for each steam generating day (PSD 96-01A):
- 1) Calendar date,
  - 2) Average hourly NO<sub>x</sub> emission rate in lb./mmBtu,
  - 3) Daily and accumulated mass per calendar year of NO<sub>x</sub>,
  - 4) The 30-day rolling average NO<sub>x</sub> emission rate in lb./mmBtu,
  - 5) Identification of each day the 30-day rolling average is in excess of the NO<sub>x</sub> standard, including reasons for the excess and description of the corrective action taken,
  - 6) Identification of any steam generating days for which NO<sub>x</sub> data were not obtained, including reasons for not obtaining sufficient data and description of corrective actions taken,
  - 7) Identification of times emission data are excluded from the calculated average emission rate and the reasons for excluding the data, and
  - 8) Identification of the "F" factor used for calculations, the method of determining the factor, and the type of fuel combusted.
- 6e. The particulate matter emission standards and opacity limits shall apply at all times except during startup. Two startup conditions are covered by this condition. Cold startup (from cold to operating condition) is typically expected to occur only a few times a year. Such cold startup scenarios shall be limited to 5 hours. Warm startup (from warm standby condition to operating condition) is expected to occur on a more regular basis. Such warm startup scenarios shall be limited to one hour. This provision does not preclude Port Townsend Paper Corporation from demonstrating that other scenarios are excused from enforcement actions as allowed pursuant to WAC 173-400-107. (PSD 96-01A).

**F. Power Boiler #2**

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
F.1	Operation	200 hours per calendar year.	Log hours of operation. Monthly report hours operated during the month and cumulative hours operated during the year.	First Revision-Order DE 97AQ-I030
		use only for back-up NCG incineration.	Log hours of operation and purpose of operation. Report monthly.	First Revision-Order DE 97AQ-I030
F.2	Particulate	0.1 gr/dscf @ 7% O <sub>2</sub> , one hour average.	Compliance demonstrated by complying with opacity limit.	WAC 173-405-040(5) (c) and Order DE 00AQIS-131
F.3	Opacity	Average 20% for more than 6 consecutive minutes in any 60 minute period, except for emissions due to soot blowing or grate cleaning for up to 15 minutes in 8 consecutive hours.	Log hours of operation with and without modified steam atomizing burners. Report as opacity excursions all hours fired without modified steam atomizing burners. Compliance may also be determined using EPA Method 9. Report excursions monthly.	WAC 173-405-040(6) and Order DE 00AQIS-131
F.4	SO <sub>2</sub>	1000 ppm @ 7% O <sub>2</sub> , hourly average.	Maintain fuel receipts showing all oil fired was ≤0.50% sulfur. Report excursions monthly.	WAC 173-405-040(11) (b) for basis of limit. First Revision-Order 97AQ-I030 for basis of monitoring.
F.5	Fuel supply	Arsenic ≤0.4 ppm by weight Cadmium ≤0.97 ppm by weight Chlorine ≤650 ppm by weight Chromium ≤10 ppm by weight Lead ≤20 ppm by weight PCBs ≤2 ppm by weight	Analyze all fuel shipments for listed parameters using EPA or ASTM approved test methods. Monthly submit a table summarizing concentrations of the listed parameters for all shipments of fuel received to be burned in the boiler. The Department may reduce monitoring frequency.	First Revision, Order DE 97AQ-I030 and WAC 173-460-150/160.
		Calcium ≤1020 ppm by weight Copper ≤30 ppm by weight	Analyze one shipment of fuel received to be burned in the boiler per permit cycle for listed parameters using EPA or ASTM approved test methods. Once per permit cycle submit a table summarizing concentrations of the listed parameters.	First Revision, Order DE 97AQ-I030 and WAC 173-460-150/160 basis for limit WAC 173-401-615(1) (b) basis for monitoring



**G. Digester, multiple-effects evaporators, condensate stripper system**

G.1 The following requirement applies to MEE E-set, C-washer, and Digesters #10, 11, & 12 only:

Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
G.1a TRS	5 ppmv @ 10% O <sub>2</sub> , unless combusted in a lime kiln or equivalent	Monitoring required by Condition C.4 shall be used to demonstrate compliance with this requirement.	40 CFR 60.283(a)(1)(i)

G.2 The following **state-only** requirements are not federally enforceable under the federal Clean Air Act:

G.2a TRS	treat noncondensable gasses to reduce TRS emission equal to reduction achieved by thermal oxidation in a lime kiln; install a backup treatment system	Monitoring required by Condition G.2b shall be used to demonstrate compliance with this requirement.	WAC 173-405-040(4)
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G.2b All noncondensable gases from the digesters, evaporators, and the condensate stripper system shall be continuously treated to reduce the emission of TRS equal to the reduction achieved by thermal oxidation in a lime kiln.

To provide continuous treatment:

the NCG collection and treatment system shall be properly operated and maintained at all times,  
venting shall be minimized, and  
venting necessary for safe/proper system operation and maintenance shall be less than 10 hours per month.

Report venting duration and cause in the monthly air report. (WAC 173-405-040(4) and DE 00AQIS -131).

## H. Millwide Limits

Millwide limits, except for the TRS limit, apply to aggregate emissions from the recovery furnace, smelt dissolver tank, lime kiln, and power boiler #10. Millwide TRS emission limits apply to the aggregate emissions from the recovery furnace, smelt dissolver tank, lime kiln, power boiler #10, evaporators, and washers.

	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
H.1	Particulate	729 tons/yr	Monitoring and reporting method 1.	Order DE 00AQIS-131
		1007 tons/yr	Monitoring and reporting method 1.	PSD-I
		5590 lbs/D	Monitoring and reporting method 3.	PSD-I
H.2	NOx	645 tons/yr	Monitoring and reporting method 1.	PSD-I
		3580 lbs/D	Monitoring and reporting method 2.	PSD-I
H.3	CO	6204 tons/yr	Monitoring and reporting method 1.	PSD-I
		34500 lbs/D	Monitoring and reporting method 3.	PSD-I
H.4	VOC	182 tons/yr	Monitoring and reporting method 1.	PSD-I
		1010 lbs/D	Monitoring and reporting method 3.	PSD-I
H.5	TRS	31.7 tons/yr	Monitoring and reporting method 1.	PSD-I
		176 lbs/D	Monitoring and reporting method 2.	PSD-I
		32 tons/yr	Monitoring and reporting method 1.	Order DE 00AQIS-131
H.6	SO <sub>2</sub>	1300 tons/yr	Monitoring and reporting method 1.	Order DE 00AQIS-131

Monitoring and reporting methods:

1. Compliance determined by adding calendar year emissions from all applicable units\*. Emissions from a unit for which the pollutant is measured shall be calculated using the average of test results collected during the year. Emissions from a unit for which the pollutant is not measured shall be calculated using emission factors and production data or fuel consumption. Report annually within 30 days of the end of the calendar year.
2. Compliance determined by adding daily emissions from all applicable units\*. Emissions from a unit for which the pollutant is measured through source testing or continuous emission monitoring shall be calculated using the most recent test results adjusted for production/hours of operation. Emissions from a unit for which the parameter is not directly measured shall be calculated using emission factors and daily production or fuel consumption data. Report monthly.
3. Compliance determined by complying with the annual limit. If annual emissions are greater than 60% of the annual limit; during the following year, compliance shall be demonstrated by monitoring and reporting according to monitoring and reporting method 2.

\* Applicable units, except for the TRS limit, include the recovery furnace, smelt dissolver tank, lime kiln, and power boiler #10. Applicable units for the TRS limit include the recovery furnace, smelt dissolver tank, lime kiln, power boiler #10, evaporators, and washers.

**FACILITY-WIDE GENERAL REQUIREMENTS [WAC 173-401-600]**

These generally applicable requirements apply facility-wide, including insignificant emission units or activities. Insignificant emission units or activities, however, are not subject to monitoring, testing, recordkeeping, reporting, or compliance certification requirements.

1. The permittee cannot vary the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant, except as directed according to air pollution episode regulations. [WAC 173-400-205]
2. The permittee shall not cause or permit emission of any contaminant if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business. [WAC 173-400-040(5)]
3. The permittee shall not install or use any means that conceal or mask an emission of an air contaminant that would otherwise violate provisions in this permit. [WAC 173-400-040(7)]
4. The permittee shall take reasonable precautions to prevent the release of air contaminants from emission units engaged in material handling, construction, demolition, or any other operation that is a source of fugitive emissions. Reasonable precautions include but are not limited to application of water to paved areas and debris piles as necessary to control fugitive dust or the timely removal or coverage of material piles. [WAC 173-400-040(3)(a)]
5. The permittee shall take reasonable precautions to prevent fugitive dust from becoming airborne and maintain and operate the source to minimize emissions. Reasonable precautions include but are not limited to application of water to paved areas and debris piles as necessary to control fugitive dust or the timely removal or coverage of material piles. [WAC 173-400-040(8)(a)]
6. The following condition is state-only and is not federally enforceable under the Clean Air Act: No deposit of particulate matter beyond property line so as to interfere unreasonably with use and enjoyment. [WAC 173-400-040(2)]
7. The following condition is state-only and is not federally enforceable under the Clean Air Act: Any person causing odor which may unreasonably interfere with use & enjoyment of property must use recognized good practice and procedures to reduce odors to a reasonable minimum. [WAC 173-400-040(4)]
8. The permittee may not cause or allow the emission of a plume from any emission unit other than a kraft recovery furnace, smelt dissolver tank, or lime kiln, which has an average opacity greater than 20% for more than 6 consecutive minutes in any 60 minute period except as provided in WAC 173-405-040(6). [WAC 173-405-040(6)]
9. Except where specific requirements are defined elsewhere, the Permittee shall assure compliance with conditions 1 through 8 by recordkeeping of actions taken by the permittee in response to complaints received by the permittee or of possible noncompliance noticed by the facility staff in day to day operations. The permittee shall assess the validity of each complaint and commence corrective action, if warranted, as soon as possible but no later than 3 working days of receiving the complaint. The permittee shall keep records of the following: complaints received; the assessment of validity; and what, if any, corrective action is taken in response to the complaint. [WAC 173-401-630]
10. The emission of sulfur dioxide from any emissions unit other than a recovery furnace or lime kiln shall not exceed 1,000 parts per million for an hourly average, corrected to 7% oxygen for combustion units. [WAC 173-405-040(11)]
11. Where this permit specifically requires continuous monitoring, the source shall, consistent with the requirements of Ecology's Source Test Manual, calibrate, maintain and operate equipment for continuously monitoring and recording the emissions specified. The source may be temporarily exempted from monitoring and reporting requirements during periods of monitoring system malfunctions, provided that the source shows to Ecology's satisfaction that the malfunction was unavoidable and is being repaired as expeditiously as practicable. [WAC 173-400-105(5)(h) and Order DE 00AQIS-131]

Ecology recognizes that monitoring data may be lost for legitimate reasons. The permittee shall make every reasonable effort to acquire, maintain, and recover valid monitoring data. Except where an applicable requirement contains more stringent provisions, permittee shall recover valid monitoring data and recordkeeping for at least 90% of the averaging periods during each month or, if no averaging period is used, collected during each month, in which this permit requires monitoring of a process or parameter. The 10% allowance is contingent on the permittee providing an acceptable explanation for the loss of monitoring data. [WAC 173-401-615 and Order DE 00AQIS-131]

12. The Permittee shall at all times, including periods of abnormal operation and upset conditions, to the extent practicable, maintain and operate any affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to Ecology which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. During periods of upset PTPC shall take immediate and appropriate corrective action to minimize emissions, including slowing or shutting down the emission unit. [WAC 173-405-040(10) and Order DE 00AQIS-131]
13. Chemical Accidental Release Program - This stationary source, as defined in 40 CFR section 68.3, is subject to part 68, the accidental release prevention regulations. This stationary source shall submit a risk management plan (RMP) by the date specified in section 68.10. This stationary source shall certify compliance with the requirements of part 68 as part of the annual compliance certification as required by 40 CFR part 70 or 71.
14. Ozone Protection - The Permittee shall comply with the applicable standards for recycling and emissions reductions pursuant to 40 CFR Part 82, Subpart F.
  - a. Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to § 82.156.
  - b. Equipment used during the maintenance, service, repair or disposal must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
  - c. Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" is defined at § 82.152.)
  - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds or refrigerant purchased and added to such appliances must do so in compliance with §82.166.
15. Wind speed and direction shall be continuously measured and recorded. Any change in location of the sensory equipment shall be approved in advance by the department. Monitoring records shall be maintained at the mill. [Order DE 00AQIS-131]
16. As affects IEUs, the permittee shall comply with applicable provisions of WAC 173-405(5), WAC 173-400-050(1)&(3), and WAC 173-400-060. [WAC 173-401-530(2)(b)]
17. The Permittee will continue to comply with applicable requirements with which the Permittee is in compliance. [WAC 173-401-630(3) and 510(2)(h)(iii)(A)]

The Permittee will meet applicable requirements that become effective during the permit term on a timely basis. [WAC 173-401-630(3) and 510(2)(h)(iii)(B)]
18. Volatile Organic Liquid Storage Vessels - The Permittee shall keep records showing the dimensions and capacities of all storage vessels having capacities greater than or equal to 40 cubic meters that are used to store volatile organic liquids and for which construction, reconstruction, or modification commenced after July 23, 1984. These records are to be kept for the life of each storage vessel. [40 CFR 60.116b (a) and (b)]
19. Reserved for future use.
20. The following condition is state-only and is not federally enforceable under the Clean Air Act. The permittee cannot burn used oil not meeting standards prescribed in RCW 70.94.610(1). [RCW 70.94.610]
21. The permittee must comply with 40 CFR sections 61.145 and 61.150 and WAC 173-400-075 if asbestos-containing material is present above specified quantities in a facility being demolished or renovated. [40 CFR Part 61, Subpart M]
- 21a. National Emissions Standards for Hazardous Air Pollutants from the Pulp and Paper Industry.
  - a) Permittee shall comply with the applicable requirements of the National Emissions Standards for Hazardous Air Pollutants from the Pulp and Paper Industry (40 CFR §§ 63.440-458), including applicable portions of the General Provisions (40 CFR §§ 63.1 through 63.11) on April 16, 2001; with the exception of the standards for Kraft pulp system provisions of § 63.443, for which the compliance deadline is on April 16, 2006. 40 CFR § 63.440(d).

- b) Permittee shall submit the initial notification report specified under 40 CFR § 63.9(b)(2) on April 16, 1999. [40 CFR § 63.455(a)]
- c) Permittee shall submit, with the initial notification report required in paragraph b above, and every two years thereafter, a non-binding control strategy report containing at a minimum, in addition to the information required under 40 CFR § 63.9(b)(2) the following:
  - i) A description of the emission controls or process modifications selected for compliance with the control requirements in this standard.
  - ii) A compliance schedule, including the dates by which each step toward compliance will be reached for each emission point or sets of emission points.
- 21b. Operating and maintenance manuals for all equipment that has the potential to affect emissions to the atmosphere shall be developed and followed. Copies of the manuals shall be available to the department. Emissions that result from a failure to follow the requirements of the manuals may be considered proof that the equipment was not properly operated and maintained. (Order DE 00AQIS-131)
- 21c. Operation of the equipment must be conducted in compliance with all data and specifications submitted as part of PSD and NOC applications unless otherwise approved by the department. (Order DE 00AQIS-131)
- 21d. Ecology may modify conditions contained herein based on air quality, emissions monitoring results, or upon the request of PTPC. (Order DE 00AQIS-131)

### **MONITORING, RECORDKEEPING & REPORTING**

#### **Monitoring Requirements [WAC 173-401-630 (5) (b)]**

- 22. Unit-Specific Requirements. The permittee shall conduct routine monitoring of emissions in accordance with the program of monitoring or testing required for specific emission units in conditions A through H of this permit. [WAC 173-405-072]  
  
Source test requirements are dependant on the number of hours a unit is operated.  
Units with a specified source test frequency of monthly must be tested each month the unit is operated more than 216 hours (30% of a 30 day month). Also, a source test must be completed during the month if at the end of the month, unit operation since the end of the month when the last previous source test was run would exceed 720 hours (100% of a 30 day month).  
Units with a specified source test frequency of quarterly must be tested each quarter the unit is operated more than 648 hours (30% of three 30 day months). Also, a source test must be completed during the month if at the end of the quarter, unit operation since the end of the quarter when the last previous source test was run would exceed 2160 hours (100% of three 30 day months).
- 23. Unavoidable Excess Emissions. This condition applies, where applicable, to excess emissions that are claimed to be unavoidable pursuant to WAC 173-400-107. The permittee may include in its monthly reports demonstrations that excess emissions were unavoidable, consistent with the requirements of WAC 173-400-107. The permittee shall have the burden to prove that deviations from permit terms were unavoidable. Excess emissions that are unavoidable are excused and are not subject to penalty. [WAC 173-400-107]
- 24. Violation Duration. A violation of an emission limit is presumed to commence at the time of the testing, recordkeeping or monitoring indicating noncompliance, and to continue until the time of retesting, recordkeeping or monitoring that indicates compliance. This presumption may be defeated if credible evidence shows that the violation was of longer duration, that there were intervening days during which no violation occurred or that the violation was not continuing in nature. [42 U.S.C. 7413(e)(2)]. The permittee may conduct monitoring or testing more frequently than required by this permit.
- 25. Insignificant Emission Units. The permittee is not subject to any testing, monitoring, reporting, or recordkeeping for the insignificant emission units or activities listed. [WAC 173-401-530(2) (c)]
- 25a. The emission limits shall be monitored at the monitoring frequency and with the compliance test methods specified in the preceding tables. The department may approve alternate compliance test methods that are of equivalent stringency for any air pollutant. Compliance monitoring frequency may be adjusted by Ecology depending on compliance history. (Order DE 00AQIS-131)
- 25b. All periodic emission sampling shall be done at equipment operating rates which are equal to or greater than the average monthly rate of the previous month. (Order DE 00AQIS-131)

- 25c. Sampling ports and platforms must be provided for each affected source after the final pollution control device. The ports must meet the requirements of Reference Method 1 of 40 CFR, Part 60, Appendix A. Other arrangements may be acceptable if approved by the department prior to installation. Adequate permanent and safe access to the test ports must be provided. (Order DE 00AQIS-131)
- 25d. The PTPC continuous emission monitoring quality assurance plan must be updated and submitted to Ecology September 16, 2000. Ecology may require the continuous emission monitoring quality assurance plan to be periodically updated in the future. The updates shall satisfy 40 CFR, Part 60, Appendix F. (Order DE 00AQIS-131)
- 25e. Data required to demonstrate compliance with emission limits in Table 1 shall be reported in written form to the Washington Department of Ecology Industrial Section or its authorized representative at least monthly (unless a different testing and reporting schedule has been approved by Ecology). The report shall be submitted in conformance with the time requirements included in WAC 173-405, but in no case later than thirty days after the end of the calendar month being reported. The report shall be in a format approved by Ecology. Report contents shall include but not be limited to the following:
- a. The average daily production of air dried unbleached pulp from chips and from the OCC process.
  - b. Process or control equipment operating parameters when required to demonstrate compliance with a limit.
  - c. The daily maximum and average concentration, in the units of the standard, for each pollutant monitored on a continuous basis.
  - d. The duration and nature of any monitor down-time.
  - e. Results of any monitor audits or accuracy checks.
  - f. Results of any stack tests using approved Ecology or EPA test methods with acceptable QA/QC.

For each occurrence of monitored emissions or process parameters in excess of the standard the report shall include the following:

- g. The time of the occurrence.
- h. Magnitude of the emission or process parameters excess.
- i. The duration of the excess.
- j. The probable cause.
- k. Any corrective actions taken or planned.
- l. Any other agency contacted.
- m. Signature of responsible person. (Order DE 00AQIS-131)

## Recordkeeping Requirements

26. The permittee shall keep records of any periodic and continuous monitoring required by this permit. These records shall include the following, where applicable:
- a. The date, place as defined in requirement, and time of sampling or measurement;
  - b. The date(s) analysis were performed;
  - c. The company or entity that performed the analysis;
  - d. The analytical techniques or methods used;
  - e. The results of such analysis;
  - f. The operating conditions existing at the time of sampling or measurement. [WAC 173-401-615(2) (a); WAC 173-400-105]
27. The permittee shall keep records describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes. [WAC 173-401-724(5)]
28. The permittee shall retain records of all required monitoring data and support information for a period of 5 years from the date of monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [WAC 173-401-615(2) (c)]
29. The permittee shall maintain a contemporaneous record of any deviation from the requirements of this permit. [WAC 173-401-615(3) (b)]

**Reporting Requirements [WAC 173-401-520, -615(3), & -710]**

30. In addition to any emission unit specific reporting requirements identified below, emission unit specific reporting requirements are identified in conditions A through H.
31. Report within 15 days of the end of each month average daily production of air-dried unbleached pulp. [WAC 173-405-072(4)]
32. Monitoring reports required by this permit must be submitted to Ecology within 15 days of the end of each calendar month. [WAC 173-405-072]. The reports must clearly identify all instances of deviations from permit requirements. [WAC 173-401-615(3)(a)]
33. Submit an inventory of emissions from the source each year no later than 105 days after the end of the calendar year; maintain records of information necessary to substantiate any reported emissions. [WAC 173-400-105(1)]
34. The permittee shall promptly submit a report of any deviations from permit conditions. [WAC 173-401-615(3)(b)]
- a. For purposes of this permit, submitting a report "promptly" means the following: (a) if the deviation presents a potential threat to human health or safety, the report shall be made as soon as possible but no later than 12 hours after the discovery of the deviation; (b) for other deviations, "promptly" means that the deviations are identified in the respective monthly report.
- b. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. [WAC 173-401-615(3)]. The permittee may include in its reports demonstrations that excess emissions were unavoidable, consistent with the requirements of WAC 173-400-107.
35. Certification of truth, accuracy and completeness. Any application form, report or compliance certification required to be submitted by this permit or by Chapter 401 WAC shall contain certification by a responsible official of truth, accuracy and completeness. Where the permit requires reporting more frequently than once every 3 months the responsible official's certification need only be submitted once every 3 months covering all required reporting since the date of the last certification. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [WAC 173-401-520]
36. All reports and renewal applications required by this permit shall be submitted to:
- Department of Ecology  
Industrial Section  
P.O. Box 47706  
Olympia, WA 98504-7706
37. Compliance Certification. The permittee shall submit a report to the Department of Ecology and to EPA Region 10 12 months after the effective date of this permit and every year thereafter, within 45 days after the close of the year that the certification covers, certifying compliance with the terms and conditions contained in this permit. The certification shall describe the following:
- a. the permit term or condition that is the basis of the certification;
- b. the compliance status;
- c. whether compliance was continuous or intermittent; and
- d. the methods used for determining compliance. [WAC 173-401-630(5)]
- The permittee is not required to certify compliance for insignificant emission units or activities. [WAC 173-401-530(2)(d)]

**STANDARD TERMS & CONDITIONS**

38. Duty to Comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of chapter 70.94 RCW and, for federally enforceable provisions, a violation of the FCAA. Such violations are grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [WAC 173-401-620(2)(a)]

39. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [WAC 173-401-620(2)(b)]
40. Permit Actions. This permit may be modified, revoked, reopened, and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [WAC 173-401-620(2)(c)]
41. Property Rights. This permit does not convey any property rights of any sort, or any exclusive privilege. [WAC 173-401-620(2)(d)]
42. Duty to Provide Information. The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA administrator along with a claim of confidentiality. Permitting authorities shall maintain confidentiality of such information in accordance with RCW 70.94.205. [WAC 173-401-620(2)(e)]
43. Permit Fees. The permittee shall pay fees as a condition of this permit in accordance with the permitting authority's fee schedule. Failure to pay fees in a timely fashion shall subject the permittee to civil and criminal penalties as prescribed in chapter 70.94 RCW. [WAC 173-401-620(2)(f)]
44. Emissions Trading. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit. [WAC 173-401-620(2)(g)]
45. Severability. If any provision of this permit is held to be invalid, all unaffected provisions of the permit shall remain in effect and be enforceable. [WAC 173-401-620(2)(h)]
46. Permit Appeals. This permit or any conditions in it may be appealed only by filing an appeal with the pollution control hearings board and serving it on the permitting authority within thirty days of receipt pursuant to RCW 43.21B.310. This provision for appeal in this section is separate from and additional to any federal rights to petition and review under § 505(b) of the FCAA. [WAC 173-401-620(2)(i)]
47. Permit Continuation. This permit is issued for a 5 year term; however, this permit and all terms and conditions contained therein, including any permit shield provided under WAC 173-401-640, shall not expire until the renewal permit has been issued or denied if a timely and complete application has been submitted. An application shield granted pursuant to WAC 173-401-705(2) shall remain in effect until the renewal permit has been issued or denied if a timely and complete application has been submitted. [WAC 173-401-620(2)(j)]
48. Inspection and Entry. Upon consent of the permittee or upon presentation of credentials and other documents as may be required by law, the Department of Ecology or an authorized representative shall be allowed to:
- (1) Enter the source;
  - (2) Have access to and copy at reasonable times any records that must be kept under this permit;
  - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - (4) As authorized by WAC 173-400-105 and the FCAA, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements.
- [WAC 173-400-105(4); WAC 173-401-630(2)]

#### **PERMIT SHIELD**

Compliance with the conditions in this permit is deemed to constitute compliance with applicable requirements as contained in this permit on which the term or condition is based, as of the date the permit is issued. [WAC 173-401-640(1)]

The Department of Ecology has determined that the requirements listed in Appendix A to this permit do not apply to the facility, as of the date the permit is issued, for the reasons specified. [WAC 173-401-640(2)]



## APPENDIX A. PERMIT SHIELD/INAPPLICABLE REQUIREMENTS

The following requirements do not apply to the facility as of the date of permit issuance for the reasons indicated:

CITE	BRIEF DESCRIPTION	REASON
WAC 173-400-040	Meet most restrictive standard where 2 or more units are connected to a common stack, and unit-specific emissions data is not provided.	Facility does not have any emission units with different emission limits connected to a common stack.
WAC 173-400-040(1)	No visible emissions over 20% opacity for 3 minutes in any one hour, with 4 exceptions.	Opacity standards in the Kraft Pulping Mill regulations (WAC 173-405) take precedence over the general emission standards of WAC 173-400. WAC 173-405-040.
WAC 173-400-040(3) (b)	emissions unit identified as a significant contributor to nonattainment must use reasonable and available control methods to control emissions of contaminants for which area is designated nonattainment.	No emissions unit at the facility have been identified as a significant contributor to nonattainment.
WAC 173-400-040(6)	General limit of 1,000 ppm <sub>dv</sub> SO <sub>2</sub>	SO <sub>2</sub> standards for emissions units at Kraft pulping mills in the Kraft Pulping Mill regulations (WAC 173-405) take precedence over the general emission standards of WAC 173-400. WAC 173-405-040.
WAC 173-400-040(8) (b)	Sources of fugitive dust identified as significant contributors to a PM-10 nonattainment area must use RACT to control fugitive dust emissions.	Facility not located near a PM-10 nonattainment area.
WAC 173-400-050(1)	No particulate emissions in excess of 0.1 grain/dscf from combustion units, except no particulate emissions in excess of 0.2 grain/dscf from units combusting wood derived fuels for production of steam.	Particulate standards for combustion sources in the Kraft Pulping Mill regulations (WAC 173-405) take precedence over the general emission standards of WAC 173-400. WAC 173-405-040.
WAC 173-400-070(2) (a)	Hog fuel boilers must meet requirements of WAC 173-400-040 & -050(1), with exceptions.	Specific emission standards for combustion sources in the Kraft Pulping Mill regulations (WAC 173-405) take precedence over the general emission standards of WAC 173-400. WAC 173-405-040.
WAC 173-400-100 Registration	Registration required for listed sources, excluding sources subject to the operating permit program, after EPA grants interim or final approval to the state program.	Facility is subject to the operating permit program; EPA has granted interim approval for the state program.
WAC 173-400-105(5) (a)	continuous opacity & SO <sub>2</sub> monitoring & recording required for fossil fuel-fired steam generators that are not subject to an NSPS, except where capacity is <250 million BTU/hr heat input or where there is an annual avg. capacity factor of ≥30%.	#10 Power Boiler is subject to a NSPS; #2 Power Boiler has a heat input capacity of <250 million BTU/hr.
WAC 173-400-105(5) (d)	continuous opacity monitoring & recording required for wood residue fuel-fired steam generators w/ capacity of ≥100 million BTU/hr heat input that are not subject to an NSPS.	#10 Power Boiler is subject to a NSPS; #2 Power Boiler does not fire wood residue fuel.
WAC 173-400-105(6)	Applies to sources that are not subject to operating permit program.	Facility is subject to the operating permit program.

WAC 173-400-151 Retrofit requirements for visibility protection	BART required for sources to which significant visibility impairment of a Class 1 area is reasonably attributable.	Facility has not been identified as a source impacting a Class I area.
WAC 173-405-040(7) [STATE ONLY, NOT FEDERALLY ENFORCEABLE]	Continuously employ best practicable operation and maintenance procedures for recovery furnaces or lime kilns with an alternative opacity limit.	Facility does not have any alternative opacity limits for recovery furnace or lime kiln.
WAC 173-405-077	Provisions of WAC 173-400-105(5) (Report of startup, shutdown, etc.) apply.	Old WAC 173-400-105(5) has been deleted from state regulations and the SIP.
Chapter 173-410 WAC; Sulfite Pulping Mills		facility is not a sulfite pulping mill.
Chapter 173-433 WAC; Solid Fuel Burning Devices	Applies to wood stoves and fireplaces.	facility does not operate such devices.
WAC 173-435-040(1)	major source, when requested in writing by Ecology must prepare a Source Emission Reduction Plan (SERP) for reducing emissions during ambient air pollution episodes.	Facility has not been requested by Ecology to prepare a SERP.
WAC 173-435-060(5)	cannot refuse entry or access to appropriate enforcement personnel determining compliance with a SERP.	Facility is not required to have a SERP.
Chapters 173-470, 474, 475, 480, 481 WAC; Ambient Air Quality Standards		WAC 173-401-200(4)(xii) states that AAQS apply to only temporary sources.
Chapter 173-490 WAC; Emission Standards and Controls for Sources of VOCs		applies only to facility types specified in the regulation; pulp and paper mills are not specified.
WAC 173-405-040(5) (b)	PM limit of 0.05 gr/dscf for units which do not combust wood and which commenced construction after Jan. 1, 1983.	Power Boiler #2 installed in 1928.
40 CFR Part 60 subpart D	NSPS for fossil fuel fired steam generators constructed after August 17, 1971.	Power Boiler #2 constructed in 1928. Recovery furnace constructed in 1968. Since then, there was no occurrence of a physical change or change in method of operation which increased pollutants to which a standard applied.
40 CFR Part 60 subpart Db	NSPS for steam generators constructed after June 19, 1984 with a heat input rating >100 mmBtu/hr.	Power boiler #2 constructed in 1928 and has a heat input rating <100 mmBtu/hr. Recovery furnace constructed in 1968. Power boiler #10 constructed in 1977. Since then, there was no occurrence of a physical change or change in method of operation which increased pollutants to which a standard applied.
40 CFR Part 60 subpart Dc	NSPS for steam generators constructed after June 9, 1989, with design heat input rating of >10 mmBtu/hr and <100 mmBtu/hr.	Power boiler #2 constructed in 1928. Recovery furnace constructed in 1968. Power boiler #10 constructed in 1977. Since then, there was no occurrence of a physical change or change in method of operation which increased pollutants to which a standard applied.

WAC 173-400-105 (5) (a)	Continuous monitoring for opacity required for fossil fuel boilers >250 mmBtu/hr.	Power boiler #2 heat input rating is <250 mmBtu/hr.
40 CFR Subpart BB	NSPS for Kraft Pulp Mill recovery furnaces constructed or modified after 9/24/76.	Recovery furnace was installed in 1968 and not modified after 9/24/76.
	NSPS for Kraft Pulp Mill smelt dissolver tanks constructed or modified after 9/24/76.	Smelt dissolver tank was installed in 1968 and not modified after 9/24/76.
	NSPS for Kraft Pulp Mill including gases from digester systems, brown stock washer systems, or multiple-effect evaporator systems constructed or modified after 9/24/76.	Digesters 1-9 were installed prior to and not modified after 9/24/76. All MEE's, except E-set, and all washers, except C-washers, were installed prior to and not modified after 9/24/76.
Order No. DE93-AQI057	concerning electrostatic precipitator replacement.	Rescinded by Ecology, 7/6/93.
40 CFR 60.44(a) (1)	Applies to subpart D facilities that combust gaseous fossil fuel.	Facility does not combust natural gas.
40CFR 60.42b(b)	Subpart Db SO <sub>2</sub> emission limits.	Package boiler does not combust coal.
40 CFR 60.42b(c)	Subpart Db SO <sub>2</sub> emission limits.	Package boiler does not use emerging technology.
40 CFR 60.42b(d)	Subpart Db SO <sub>2</sub> emission limits.	Package boiler does not combust oil other than very low sulfur oil.
40 CFR 60.42b(f)	Subpart Db SO <sub>2</sub> emission limits average basis.	Package boiler is not limited to annual capacity factor of 10% or less.
40 CFR 60.43b(c)	Subpart Db PM emission limits.	Package boiler does not combust wood.
40 CFR 60.43b(d)	Subpart Db PM emission limits.	Package boiler does not combust solid waste.
40 CFR 60.44b(a) (1)	Subpart Db NO <sub>x</sub> emission limits.	Package boiler does not combust natural gas.
40 CFR 60.44b(a) (2) (i)	Subpart Db NO <sub>x</sub> emission limits.	Package boiler does not combust oil with a low heat release rate.
40 CFR 60.44b(a) (4)	Subpart Db NO <sub>x</sub> emission limits.	Package boiler does not use duct burner in a combined cycle system.
40 CFR 60.44b(b) and(c) and (d) and (e)	Subpart Db NO <sub>x</sub> emission limits.	Package boiler does not simultaneously combust mixtures of coal, oil, natural gas, solid waste, or byproduct/waste.
40 CFR 60.44b(j)	Subpart Db NO <sub>x</sub> emission limit average basis.	Package boiler is not limited to annual capacity factor of 10% or less.
40 CFR 60 Subpart K	NSPS for petroleum storage vessels constructed or modified after 6/11/73 and prior to 5/19/78.	Fuel oil storage tank constructed in 1932 and not since modified.
40 CFR 60 Subpart Ka	NSPS for petroleum storage vessels constructed or modified after 5/18/78 and prior to 7/23/84.	Fuel oil storage tank constructed in 1932 and not since modified.
40 CFR 60 Subpart Kb	NSPS for petroleum storage vessels constructed or modified after 7/23/84.	Fuel oil storage tank constructed in 1932 and not since modified. Propane tank (18,000 gal) installed in 1981 and not since modified.

**APPENDIX B - FORMULAS FOR EMISSION CALCULATIONS**

NOTE: The Permittee may use an equivalent alternative method with written approval by Ecology

Permit Condition B.1

$$\frac{\text{lbs}}{\text{ton BLS}} = (\text{concentration} \times \text{air flow rate} \times \text{unit conversion factor} \times \text{time adjustment}) \div \text{tons BLS burned}$$

*Concentration* is measured using a reference method to measure particulate concentrations in gr/dscf.

*Air Flow Rate* must be representative of operation. Air flow measured during the test or a "f" factor from the federal register times heat input may be used.

*Unit Conversion Factor* is case specific. For particulate conversions 1 lb = 7,000 grains.

*Time Adjustment* is case specific and is dependent on the flow rate time unit. The measured unit is multiplied by the conversion factor to attain the desired time unit.

*Tons BLS Burned* is the tons of black liquor solids burned during the adjusted time period.

Permit Conditions D.1, D.3, D.4, E.1a, E.3, and E.4,

$$\frac{\text{lbs}}{\text{mmBtu}} = (\text{concentration} \times \text{air flow rate} \times \text{unit conversion factor} \times \text{time adjustment}) \div \text{mmBtu applied}$$

*Concentration* is measured using a reference method or continuous monitor. Particulate concentrations are in gr/dscf and chemical concentrations are in ppm.

*Air Flow Rate* must be representative of operation. Air flow measured during the test or a "f" factor from the federal register times heat input may be used.

*Unit Conversion Factor* is case specific. For particulate conversions 1 lb = 7,000 grains. For ppm measurements, molar mass and molar volume for the chemical being measured are used.

*Time Adjustment* is case specific and is dependent on the flow rate time unit. The measured unit is multiplied by the conversion factor to attain the desired time unit.

*mmBtu Applied* is the millions of Btu's in the fuel burned during the adjusted time period.

Permit Conditions H.1 - H.6 (for directly measured emissions),

$$\frac{\text{lbs}}{\text{day}} = \text{concentration} \times \text{air flow rate} \times \text{unit conversion factor} \times \text{time adjustment}$$

*Concentration* is measured using a reference method or continuous monitor. Particulate concentrations are in gr/dscf and chemical concentrations are in ppm.

*Air Flow Rate* must be representative of operation. Air flow measured during the test or a "f" factor from the federal register times heat input may be used.

*Unit Conversion Factor* is case specific. For particulate conversions 1 lb = 7,000 grains. For ppm measurements, molar mass and molar volume for the chemical being measured are used.

*Time Adjustment* is case specific and is dependent on the flow rate time unit. The measured unit is multiplied by the conversion factor to attain the desired time unit.

$$\frac{\text{tons}}{\text{year}} = \sum \frac{\text{lbs}}{\text{day}} \text{ for the calander year} \times \text{unit conversion factor}$$

*Unit Conversion Factor* is 1 ton = 2000 lbs.

**APPENDIX C - PACKAGE BOILER OPERATIONAL PRACTICES**

TS #4

#29 SOP

**APPENDIX D - ORDERS AND PERMITS**

First Revision - NOC Order No. DE 97AQ-I030

No. PSD-96-01A

Order No. DE 00AQIS-131

No. PSD-I (Appendix A of Order No. DE 00AQIS-131)

**APPENDIX E - DEFINITIONS OF ABBREVIATIONS USED IN PERMIT**

ADMT	air dry metric ton
average	arithmetic average
avg	average
BACT	Best available control technology
BART	Best available reasonable technology
BDMT	bone dry metric ton
BL	black liquor
BLS	black liquor solids
BTU	British thermal unit
CEM	continuous emission monitor
CO	carbon monoxide
DOE	Department of Ecology
dscf	dry standard cubic foot
EPA	Environmental Protection Agency
ESP	electrostatic precipitator
FCAA	Federal Clean Air Act
gpm	gallons per minute
gr	grain
HAP	hazardous air pollutant
IEU	insignificant emission unit
kg	kilogram
lbs	pounds
LM	lime mud
MACT	maximum available control technology
MMBTU	million British thermal units
NOx	oxides of nitrogen
NCG	noncondensable gas
NSPS	new source performance standards
PM	particulate matter
PM-10	particulate matter less than 10 microns in diameter
ppm	parts per million
ppmdv	part per million dry volume
PTPC	Port Townsend Paper Corporation
RACT	Reasonable available control technology
SERP	source emission reduction plan
SIP	state implementation plan
SO <sub>2</sub>	sulfur dioxide
tpy	tons per year
TRS	total reduced sulfur
TSP	total suspended particulate
U.S.C.	United States Code
VOC	volatile organic compound
WAC	Washington Administrative Code